FLORENCE COPPER

FLORENCE COPPER INC.
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January 7, 2021

Ms. Maribeth Greenslade, Associate Environmental Engineer
Water Quality Division
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

Subject: Mine Shaft Water Sample Analysis
Florence Copper, Production Test Facility
Aquifer Protection Permit No. 106360 and 101704

Dear Ms. Greenslade:

In accordance with Section 2.5.1 of Temporary Aquifer Permit No. P-106360 Florence Copper is submitting this report for water analysis of the underground mine (mine shaft) workings. Sampling for parameters listed in Section 4.1, Table 4.1-2C was conducted on November 19, 2020 following cessation of copper cathode production on October 28th. Laboratory results were received on December 21, 2020. Pace Laboratories in Phoenix, AZ performed the bulk of the analysis and missed testing for ammonia as N. Since results were received beyond the 28-day holding time for ammonia, Florence Copper proposes sampling for ammonia during our 1st quarter 2021 sampling event scheduled to begin in February 2021. BTEX and total petroleum hydrocarbon (TPH) analysis was conducted by Eurofins Test America, Phoenix, and radiochemistry analyses were conducted by Radiation Safety Engineering, Inc. in Chandler, AZ.

Results were received on December 21,2020. Table 1 lists all the analytes and results. Non-detect values are recorded as less than the laboratory practical quantitation limit for that specific analyte.

Please feel free to contact me at 520-374-3984 if you have any questions or require additional information.

Sincerely,

Florence Copper, Inc.

Brent Berg
General Manager

Cc: Nancy Rumrill, EPA

Underground Workings Monitoring Parameters	Rinsing Phase 11/19/2020 Sample Results	Units
pH - Field	6.71	
pH (pH Units), Lab	6.9	-
Specific Conductance - field	1285	µmhos/cm
Conductivity, Lab	1230	µmhos/cm
Total Dissolved Solids (Residue, Filterable)	689	mg/L
Alkalinity, Total (as CaCO3)	341	mg/L
Alkalinity, Carbonate (as CaCO3)	<5	mg/L
Alkalinity, Bicarbonate (as CaCO3)	341	mg/L
Nitrogen, Nitrate (as N)	<0.10	mg/L
Sulfate	<0.10	mg/L
Chloride	171	mg/L
Fluoride	0.55	mg/L
Calcium	92.7	mg/L
Nitrogen, Ammonia (as N)	*	mg/L
Magnesium	21.1	mg/L
Potassium	6.8	mg/L
Sodium	144	mg/L
Iron	18.4	mg/L
Aluminum	0.022	mg/L
Antimony	<0.00050	mg/L
Arsenic	0.00017	mg/L
Barium	0.051	mg/L
Beryllium	0.00015	mg/L
Cadmium	<0.00008	mg/L
Chromium	0.00033	mg/L
Cobalt	0.0028	mg/L
Copper	<0.0010	mg/L
Lead	<0.00010	mg/L
Manganese	1.1	mg/L
Mercury	<0.0020	mg/L
Nickel	0.00029	mg/L
Selenium	0.00019	mg/L
Thallium	<0.00010	mg/L
Zinc	0.0029	mg/L
Gross Alpha	3.3±0.9	pCi/L
Adjusted Gross Alpha	NA	pCi/L
Radium 226 + Radium 228	0.6±0.2	pCi/L
Uranium Isotopes (if Gross Alpha > 12.0)	NA	pCi/L

Underground Workings Monitoring Parameters	Rinsing Phase 11/19/2020 Sample Results	Units
TPH Diesel	0.902	mg/L
Benzene	<0.001	ug/L
Toluene	<0.001	ug/L
Ethylbenzene	<0.001	ug/L
Xylenes, Total	<0.003	ug/L
Uranium, Lab	<0.00050	mg/L

* Laboratory missed holding time for testing for ammonia as N. Florence Copper will collect a sample for ammonia in 1Q2021.